

Amendments to the Claims

The following listing of claims will replace all prior versions and listings of claims in the application.

1. (Original) 2,3-dimethyl-8-(2,6-dimethylbenzylamino)-N-hydroxyethyl-imidazo-[1,2-a]pyridine-6-carboxamide mesylate salt and crystalline forms thereof.
2. (Currently amended) **The** [A] compound according to claim 1, wherein the crystalline form is 2,3-dimethyl-8-(2,6-dimethylbenzylamino)-N-hydroxyethyl-imidazo-[1,2-a]pyridine-6-carboxamide mesylate salt form A, characterized by a triclinic unit cell with parameters:
 $a = 8.6 \text{ \AA}$, $b = 18.7 \text{ \AA}$, $c = 15.8 \text{ \AA}$, $\alpha = 90^\circ$, $\beta = 113^\circ$, $\gamma = 90^\circ$.
3. (Currently amended) **The** [A] compound according to claim 1, wherein the crystalline form is 2,3-dimethyl-8-(2,6-dimethylbenzylamino)-N-hydroxyethyl-imidazo-[1,2-a]pyridine-6-carboxamide mesylate salt form A, characterized **by** [in providing] an X-ray powder diffraction pattern exhibiting substantially the following d-values:

Form A		
d-value (\AA)	d-value (\AA)	d-value (\AA)
11.4	5.7	3.92
9.3	4.72	3.18
7.8	4.35	

4. (Currently amended) **The** [A] compound according to claim 1, wherein the crystalline form is 2,3-dimethyl-8-(2,6-dimethylbenzylamino)-N-hydroxyethyl-imidazo-[1,2-a]pyridine-6-carboxamide mesylate salt form A, characterized **by** [in providing] a Raman Spectrum exhibiting substantially the following relative intensities above 18.6:

Raman shift (cm ⁻¹)	Relative intensity	Raman shift (cm ⁻¹)	Relative intensity
2935.9	56.2	1042.3	41.6
1671.2	31.8	877.6	33.6
1617.7	56.6	781.7	28.1
1597.2	35.8	708.6	18.6
1590.4	39.4	554.9	23.7
1533.9	26.3	542.8	22.3
1484.4	22.6	535.7	25.9
1427.1	100.0	501.2	29.9
1415.8	85.8	379.6	25.2
1392.9	46.7	352.9	22.6
1383.1	55.8	338.1	28.8
1296.2	20.1	268.3	22.3
1271.1	25.5	239.7	39.8
1258.2	42.0	228.2	33.2
1095.5	21.5	196.8	26.6
1059.7	20.4		

5. (Currently amended) The [A] compound according to claim 1, wherein the crystalline form is 2,3-dimethyl-8-(2,6-dimethylbenzylamino)-N-hydroxyethyl-imidazo-[1,2-a]pyridine-6-carboxamide mesylate salt form B, characterized by a triclinic unit cell with parameters:
 $a = 8.4 \text{ \AA}$, $b = 14.2 \text{ \AA}$, $c = 19.9 \text{ \AA}$, $\alpha = 93^\circ$, $\beta = 100^\circ$, $\gamma = 97^\circ$.

6. (Currently amended) **The** [A] compound according to claim 1, wherein the crystalline form is 2,3-dimethyl-8-(2,6-dimethylbenzylamino)-N-hydroxyethyl-imidazo-[1,2-a]pyridine-6-carboxamide mesylate salt form B, characterized **by** [in providing] an X-ray powder diffraction pattern exhibiting substantially the following d-values:

Form B		
d-value (Å)	d-value (Å)	d-value (Å)
11.8	8.3	4.72
11.1	5.9	4.52
9.8	5.5	

7. (Currently amended) **The** [A] compound according to claim 1, wherein the crystalline form is 2,3-dimethyl-8-(2,6-dimethylbenzylamino)-N-hydroxyethyl-imidazo-[1,2-a]pyridine-6-carboxamide mesylate salt form B, characterized **by** [in providing] a Raman Spectrum exhibiting substantially the following relative intensities above 18.6:

Raman shift (cm ⁻¹)	Relative intensity	Raman shift (cm ⁻¹)	Relative intensity
2937.4	53.5	1100.1	21.9
2928.8	41.9	1040.8	50.7
1671.4	33.5	964.9	18.6
1617.0	47.9	888.2	34.4
1590.3	39.1	871.9	28.4
1533.8	20.9	777.4	31.6
1480.7	20.9	751.4	19.1
1461.0	21.4	710.3	18.6
1426.4	81.9	553.1	26.0
1417.3	100.0	536.1	26.5
1394.4	50.2	501.3	31.2

1383.1	59.1	382.3	22.3
1357.5	20.9	353.1	25.6
1305.8	24.7	335.5	32.1
1280.3	19.1	285.4	22.8
1254.9	55.8	241.1	41.4
1163.5	22.8	198.9	22.3

8. (Currently amended) **The** [A] compound according to claim 1, wherein the crystalline form is 2,3-dimethyl-8-(2,6-dimethylbenzylamino)-N-hydroxyethyl-imidazo-[1,2-a]pyridine-6-carboxamide mesylate salt form C, characterized **by** [in providing] an X-ray powder diffraction pattern exhibiting substantially the following d-values:

Form C		
d-value (Å)	d-value (Å)	d-value (Å)
13.1	5.7	3.57
10.7	4.88	3.51
6.8	4.39	

9. (Currently amended) **The** [A] compound according to claim 1, wherein the crystalline form is 2,3-dimethyl-8-(2,6-dimethylbenzylamino)-N-hydroxyethyl-imidazo-[1,2-a]pyridine-6-carboxamide mesylate salt form D, characterized **by** [in providing] an X-ray powder diffraction pattern exhibiting substantially the following d-values:

Form D		
d-value (Å)	d-value (Å)	d-value (Å)
13.8	6.4	3.55
9.1	5.1	2.38
6.9	4.62	

10. (Currently amended) **The** [A] compound according to claim 1, wherein the crystalline form is 2,3-dimethyl-8-(2,6-dimethylbenzylamino)-N-hydroxyethyl-imidazo-[1,2-a]pyridine-6-carboxamide mesylate salt form D, characterized by a triclinic unit cell with parameters:

$$a = 8.6 \text{ \AA}, b = 15.9 \text{ \AA}, c = 19.4 \text{ \AA}, \alpha = 70^\circ, \beta = 89^\circ, \gamma = 75^\circ.$$

11. (Currently amended) **The** [A] compound according to claim 1, wherein the crystalline form is 2,3-dimethyl-8-(2,6-dimethylbenzylamino)-N-hydroxyethyl-imidazo-[1,2-a]pyridine-6-carboxamide mesylate salt form E, characterized **by** [in providing] an X-ray powder diffraction pattern exhibiting substantially the following d-values:

Form E		
d-value (Å)	d-value (Å)	d-value (Å)
12.5	6.1	3.88
10.1	5.1	3.71
9.5	4.61	

12. (Currently amended) **The** [A] compound according to claim 1, wherein the crystalline form is 2,3-dimethyl-8-(2,6-dimethylbenzylamino)-N-hydroxyethyl-imidazo-[1,2-a]pyridine-6-carboxamide mesylate salt form F, characterized **by** [in providing] an X-ray powder diffraction pattern exhibiting substantially the following d-values:

Form F		
d-value (Å)	d-value (Å)	d-value (Å)
13.5	5.8	3.70
7.9	5.0	3.63
6.9	3.96	

13. (Currently amended) **The** [A] compound according to claim 1, wherein the crystalline form is 2,3-dimethyl-8-(2,6-dimethylbenzylamino)-N-hydroxyethyl-imidazo-[1,2-a]pyridine-6-carboxamide mesylate salt form G, characterized **by** [in providing] an X-ray powder diffraction pattern exhibiting substantially the following d-values:

Form G		
d-value (Å)	d-value (Å)	d-value (Å)
13.6	6.4	3.82
10.1	5.7	3.61
9.2	5.1	

14. (Currently amended) **The** [A] compound according to claim 1 wherein the crystalline form is 2,3-dimethyl-8-(2,6-dimethylbenzylamino)-N-hydroxyethyl-imidazo-[1,2-a]pyridine-6-carboxamide mesylate salt form H, characterized **by** [in providing] an X-ray powder diffraction pattern exhibiting substantially the following d-values:

Form H		
d-value (Å)	d-value (Å)	d-value (Å)
11.1	6.3	3.84
8.0	5.4	3.59
7.1	4.01	

15. (Currently amended) 2,3-dimethyl-8-(2,6-dimethylbenzylamino)-N-hydroxyethyl-imidazo[1,2-a]pyridine-6-carboxamide mesylate salt **comprising** [, characterized in being] a mixture of two or more of the crystalline forms of 2,3-dimethyl-8-(2,6-dimethylbenzylamino)-N-hydroxyethyl-imidazo[1,2-a]pyridine-6-carboxamide mesylate salt **according to any one of** [defined in] claims 2 to 14.

16. (Currently amended) 2,3-dimethyl-8-(2,6-dimethylbenzylamino)-N-hydroxyethyl-imidazo[1,2-a]pyridine-6-carboxamide mesylate salt **comprising** [, characterized in being] a mixture of form A and form B.
17. (Currently amended) 2,3-dimethyl-8-(2,6-dimethylbenzylamino)-N-hydroxyethyl-imidazo[1,2-a]pyridine-6-carboxamide mesylate salt **comprising** [, characterized in being] a mixture of two or more **crystalline forms of the compound selected from the group consisting** of form A, form B and form H.
18. (Currently amended) A process for the preparation of form A **according to** [as defined in] any **one** of claims 2 to 4 comprising the steps of:
 - a) dissolving or suspending 2,3-dimethyl-8-(2,6-dimethylbenzylamino)-N-hydroxyethyl-imidazo[1,2-a]pyridine-6-carboxamide in a suitable solvent;
 - b) adding methanesulfonic acid at a higher temperature;
 - c) allowing the solution or suspension to crystallize; and
 - d) isolating the form A thus obtained.
19. (Currently amended) A process for the preparation of form B **according to** [as defined in] any **one** of claims 5 to 7 comprising the steps of:
 - a) dissolving or suspending 2,3-dimethyl-8-(2,6-dimethylbenzylamino)-N-hydroxyethyl-imidazo[1,2-a]pyridine-6-carboxamide in a suitable solvent;
 - b) adding methanesulfonic acid at a lower temperature;
 - c) allowing the solution or suspension to crystallize; and
 - d) isolating the form B thus obtained.
20. (Currently amended) A process for the preparation of form A **according to** [as defined in any **one** of claims 2 to 4 comprising the steps of:
 - a) dissolving or suspending any form of 2,3-dimethyl-8-(2,6-dimethylbenzylamino)-N-hydroxyethyl-imidazo[1,2-a]pyridine-6-carboxamide mesylate salt in a suitable solvent;
 - b) allowing the solution or suspension to crystallize at higher temperature, optionally using form A to induce crystallization; and
 - c) isolating the form A thus obtained.

21. (Currently amended) A process for the preparation of form B **according to** [as defined in] any **one** of claims 5 to 7 comprising the steps of:
- a) dissolving or suspending any form of 2,3-dimethyl-8-(2,6-dimethylbenzylamino)-N-hydroxyethyl-imidazo[1,2-a]pyridine-6-carboxamide mesylate salt in a suitable solvent;
 - b) allowing the solution or suspension to crystallize at a lower temperature, optionally using form B to induce crystallization; and
 - c) isolating the form B thus obtained
22. (Currently amended) **The** [A] process for the preparation of form A according to claim 20, wherein [the] form **B** of 2,3-dimethyl-8-(2,6-dimethylbenzylamino)-N-hydroxyethyl-imidazo[1,2-a]pyridine-6-carboxamide mesylate salt is **dissolved or suspended in accordance with step a)** [form B].
23. (Currently amended) **The** [A] process for the preparation of form B according to claim 21, wherein [the] form **A** of 2,3-dimethyl-8-(2,6-dimethylbenzylamino)-N-hydroxyethyl-imidazo[1,2-a]pyridine-6-carboxamide mesylate salt is **dissolved or suspended in accordance with step a)** ~~2,3-dimethyl-8-(2,6-dimethylbenzylamino)-N-hydroxyethyl-imidazo[1,2-a]pyridine-6-carboxamide mesylate salt form A.~~
24. (Currently amended) **The** [A] process according to **claim** [any of claims] 18 or 19, **wherein** [characterized in that] seeds are added to the solution or suspension to induce crystallization.
25. (Currently amended) **The** [A] process according to any one of claims 18, 20, 22 **or** [and] 24 wherein the higher temperature is a temperature of 40 °C or above.
26. (Currently amended) **The** [A] process according to any one of claims 19, 21, 23 **or** [and] 24 wherein the lower temperature is a temperature lower than 40 °C.

27. (Currently amended) 2,3-dimethyl-8-(2,6-dimethylbenzylamino)-N-hydroxyethyl-imidazo[1,2-a]pyridine-6-carboxamide mesylate salt form A [or form B] prepared according to any one of claims 18, 20, 22 or 24-26 [to 26].
28. (Currently amended) A pharmaceutical formulation comprising at least one of the crystalline forms of 2,3-dimethyl-8-(2,6-dimethylbenzylamino)-N-hydroxyethyl-imidazo[1,2-a]pyridine-6-carboxamide mesylate salt according to [as defined in] any one of claims 1 to 14 in admixture with at least one pharmaceutically acceptable excipient.
29. (Currently amended) A method of treating or inhibiting a gastrointestinal disorder comprising the administration of a therapeutically effective amount of [Use] of 2,3-dimethyl-8-(2,6-dimethylbenzylamino)-N-hydroxyethyl-imidazo[1,2-a]pyridine-6-carboxamide mesylate salt according to [as defined in] any one of claims 1 to 14 to a patient in need thereof [in therapy].
30. Canceled
31. (Currently amended) The method according to claim 29, ~~use in accordance with claim 30~~ wherein the gastrointestinal disorder is a [disorders are] gastrointestinal inflammatory disease [diseases] or a gastric acid-related disease. [diseases]
32. (Currently amended) The method according to claim 29, ~~use in accordance with claim 30~~ wherein the gastrointestinal disorder is selected from the group consisting of ~~inflammatory diseases or gastric acid-related diseases~~ are gastritis, gastric ulcer, duodenal ulcer, peptic ulcer diseases, reflux esophagitis, Zollinger-Ellison syndrome, gastrinomas and [,] acute upper gastrointestinal bleeding.
33. Canceled

34. Canceled
35. (Currently amended) A method of treating or inhibiting an ~~The use in accordance with~~
~~claim 30 is in treatment or prevention of airway~~ disorder comprising the
administration of a therapeutically effective amount of 2,3-dimethyl-8-(2,6-
dimethylbenzylamino)-N-hydroxyethyl-imidazo[1,2-a]pyridine-6-carboxamide
mesylate salt according to any one of claims 1 to 14 to a patient in need thereof
[disorder].
36. (Currently amended) The method according to ~~use in accordance with~~ claim 35,
wherein the airway disorder is selected from the group consisting of bronchitis, COPD,
asthma, pneumonitis, pulmonary fibrosis, acid aspiration and acid asthma.
37. (Canceled)
38. (New) 2,3-dimethyl-8-(2,6-dimethylbenzylamino)-N-hydroxyethyl-imidazo[1,2-
a]pyridine-6-carboxamide mesylate salt form B prepared according to any one of claims
19, 21 or 23-26.